

Water Reuse and Conservation Workgroup
Steering Workgroup Reply to Responses on Fundamental Questions

1. Define concentric rings from each existing and proposed treatment plant to establish a range of distances for re-use of treated municipal wastewater? Answer the question, "What is the total quantity of re-use opportunities within those concentric rings for re-use in agricultural, commercial, industrial, landscaping, aquifer recharge and golf-course applications, during the period April 15 to Sept. 30?"

Response: We believe this should be April 1 to October 31. Please confirm. In addition, it would be helpful to know which months have greater benefit to the river from reuse.

Reply from Steering Workgroup: Yes, the Re-Use & Conservation Workgroup should consider the April 1-October 31 timeframe in their analysis of re-use opportunities. This timeframe for the growing season is a first-tier consideration. The Workgroup should bear in mind that there are other potential opportunities for re-use such as aquifer recharge and industrial re-use which are not as seasonal.

2. Estimate the phosphorus reduction that can be attributed to re-use of municipal wastewater assuming reasonable opportunities are captured over the next 20 year period.

Response: We believe this should be an estimate of flow reduction rather than phosphorus reduction. We are not sure how to estimate phosphorus reduction until we know what the concentrations will be discharged from the treatment facilities (technology workgroup). We can provide information on the flows diverted to water reuse so that phosphorus reduction could be calculated once treatment levels are defined. Please confirm.

Reply from Steering Workgroup: The Re-Use & Conservation Workgroup should focus on an estimate of flow reductions rather than phosphorus reductions. The Workgroup should await a request from the Technology Workgroup before applying a calculation to these estimates to develop a set of phosphorus reduction ranges or a month-by-month tabulation of averages, as deemed appropriate.

3. What lessons from experience of other communities in arid climates are there in regard to timing and scale of implementing water re-use measures?

Response: We have had some difficulty understanding the purpose of this question. Is it simply meant to document successes and barriers that other communities have had? If so, why does it specify arid climates (or in the other version – climates similar to Spokane)? Is there something more specific that we are trying to accomplish? Please clarify the goal.

Reply from Steering Workgroup: In looking at this question, the Steering Workgroup would like to clarify the goal of the Re-Use & Conservation Workgroup: to identify the range of potential opportunities for re-use that exist in the Spokane River basin. With this in mind, the Workgroup should focus on the following elements: (a) identify the largest and most immediate re-use opportunities in the area, (b) identify the longer term and perhaps more comprehensive re-use opportunities in the area and (c) as time allows, identify the experiences of other communities (similar in climate and scale) to determine the possible long term range of opportunities, degree of difficulty of implementation, and other dimensions of their re-use activities. As the Workgroup addresses these three elements, they may also see fit to identify if a more thorough study of re-use potential would be useful to help guide actions over the long haul.

4. What is a reasonable expectation for reduction in municipal wastewater influent flows from water conservation measures in the Spokane region?

Response: No questions at this time.

5. Is the cost estimate, prepared by the City of Spokane and Spokane County for land application of municipal wastewater accurate to within an engineering order of magnitude standard.

Response: This question was deleted at the last full committee meeting but appeared in our starter packages. Is it deleted?

Reply from Steering Workgroup: Yes, this question has been deleted and the Re-Use & Conservation Workgroup does not need to provide an answer.

6. What is the order of magnitude cost for aquifer recharge alternatives given the analysis done in #1 above?

Response: Question 6 is a new question that appeared in our starter packages and was added after the full committee meeting. Why are we specifically looking at cost for aquifer recharge alternatives vs. cost for any water reuse or conservation alternatives?

Reply from Steering Workgroup: The Re-Use & Conservation Workgroup does not need to focus on the order of magnitude of costs for aquifer recharge at the moment. Costs will be considered at a later point. The Workgroup should focus on looking within the concentric rings described in question #1 and identify opportunities for aquifer recharge. The group should then describe the likely applicability for priority of these various aquifer recharge opportunities. The Steering Workgroup would appreciate receiving the Reuse and Conservation Workgroup's "key questions" that need to be answered about aquifer recharge for the Spokane area.